

2431-102



#20  
C. Que  
12/02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
F. CESARE ✓ )  
Serial No. 09/138,926 ✓ )  
Filed: August 24, 1998 ✓ )  
For: ✓ LOW MOLECULAR WEIGHT )  
POLYMERS AND THEIR USE )  
AS DISPERSION AIDS )

Examiner: S. Nolan ✓

Group Art Unit: 1772 ✓

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**RESPONSE**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

This is in response to the Office Action mailed October 21, 2002. If any fees are occasioned by the filing of this paper, please charge the same to Deposit Account No. 02-2135.

**35 USC §112, second paragraph**

Reconsideration and withdrawal of the rejection of claims 14-30 under 35 U.S.C. §112, second paragraph, as being allegedly indefinite are respectfully requested. The Action alleges that the claims are indefinite because the

term "high molecular weight polymer" is unclear. Applicant respectfully traverses, as the rejection has no merit substantively or procedurally.

*First*, it is respectfully submitted that the rejection should not apply to claim 29 which, by virtue of its dependency from claim 1, does not contain the allegedly unclear term.

*Second*, it is respectfully submitted that the term would be well understood by one of ordinary skill in the present art. From a reading of the specification it is clear that at a minimum, the claimed high molecular weight component has a molecular weight higher than that of the claimed low molecular weight component. Moreover, the specification at page 5, line 29 to page 6, line 2 describes several preferred examples of high molecular weight materials, all of which would be familiar to one of ordinary skill.

It is also noted that the allegedly unclear term has been present in claim 14 since the application was filed on August 24, 1998, over four years ago. The issue was never raised in any of the previous five Actions (dated February 23, 2000; September 25, 2000; April 10, 2001; December 31, 2001; and May 24, 2002), even though rejections based on 35 USC §112 were made in the February 23, 2000, April 10, 2001

and May 24, 2002 Actions. Indeed, the May 24, 2002 Action specifically rejected claims 14-30 as being allegedly indefinite, but the high molecular weight language was never mentioned as a basis for rejection. That history belies the present allegation of lack of clarity, and further amounts to piecemeal examination which is condemned by the PTO rules and the MPEP:

Piecemeal examination should be avoided as much as possible. The examiner ordinarily should reject each claim on all valid grounds available, avoiding, however, undue multiplication of references.

MPEP §707.07(g). See also 37 CFR §1.104(a) ("The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed . . .") and §1.104(b) ("The examiner's action will be complete as to all matters . . ."). The rejection should be withdrawn.

### **35 USC §103**

Reconsideration and withdrawal of the rejection of claims 1-13 under 35 USC §103(a) as being unpatentable over Allen, and the rejection of claims 14 and 23-28 under 35 USC §103(a) as being unpatentable over Frances in view of Allen, are respectfully requested.

*First*, it is respectfully submitted that the prosecution history of the present application belies the present assertion of obviousness based on Allen alone, or Frances in view of Allen. Allen and Frances were first cited in the February 23, 2000 Action, and were relied on in connection with one rejection under 35 USC §102 (Allen applied to claims 1-4 and 8-10) and three rejections under 35 USC §103 (Allen and Frances applied to claims 4-13 and 14-28). In the May 23, 2000 Amendment, claims 1 and 14 were amended. In response, the September 25, 2000 Action withdrew all rejections based on Allen and Frances. Allen was not cited in any of the four succeeding Actions prior to the present one. Frances was relied on in rejecting claims 11-28 under §103 in the September 25, 2000 Action. After those claims were amended on January 25, 2001, the rejection based on Frances was withdrawn, and Frances was not cited in any of the next three Actions. The present claims are no broader than they were on September 25, 2000 when all rejections based on Allen were withdrawn, and on April 10, 2001 when the last rejection based on Frances was withdrawn.

The present Action has advanced no reason at all, much less a compelling one, for reploting the same old ground.

As with the §112 rejection discussed above, the present rejection is simply an improper piecemeal examination:

To bring the prosecution to as speedy conclusion as possible and at the same time to deal justly by both the applicant and the public, the invention as disclosed and claimed should be thoroughly searched in the first action and the references fully applied; and in reply to this action the applicant should amend with a view to avoiding all the grounds of rejection and objection. Switching from one subject matter to another in the claims presented by applicant in successive amendments, or from one set of references to another by the examiner in rejecting in successive actions claims of substantially the same subject matter, will alike tend to defeat attaining the goal of reaching a clearly defined issue for an early termination, i.e., either an allowance of the application or a final rejection.

MPEP §706.07. Rejecting the present claims under a reference that, in the case of Allen, was applied almost three years ago, and which was withdrawn over two years ago, simply does not aid in an early termination of proceedings.

When the substance of the rejections are considered, it is clear that Allen does not make out a *prima facie* case of obviousness of any of claims 1-13. Allen discloses that high molecular weight ethylene-propylene copolymers can be blended with low molecular weight materials, and the resulting blends exhibit improved properties compared to high molecular weight materials blended with extender oils. Notably, Allen discloses that all of its low molecular weight materials are *liquid* at ambient temperature (page 2,

lines 55-56). In contrast, claims 1-13 recite that the claimed polymer is *solid* at room temperature. Moreover, as the Action acknowledges, Allen does not suggest the presently-claimed viscosity average molecular weight, or the use of reinforcing fibers.

The Action passes over the differences, stating that selection of a terpolymer of suitable viscosity average molecular weight is a matter of "engineering choice," and that the motivation for the addition of fibers is to produce high strength articles. Applicant respectfully traverses. First, resort to engineering choice does not fill in the gap between the present claims and Allen, when the reference plainly teaches that its terpolymers are liquids at ambient temperatures. Because the claimed terpolymers are solids, Allen teaches away from the present claims. It has long been recognized that a rejection under §103 cannot be sustained where the art relied on teaches away from the rejected claims:

The teaching of Varela therefore discourages research in the very field where appellants made their invention. . . . They have invented a method . . . in the face of art which strongly suggests that such a method would produce unacceptable results. This is the very antithesis of obviousness.

*In re Rosenberger*, 156 USPQ 24, 26 (CCPA 1967). So too here. Applicant has made a valuable invention in the face

of art pointing in the other direction. What applicant has done is much more than routine engineering design.

There is also no suggestion or motivation evident from Allen that its compositions could or should be altered by the addition of fibers. To the contrary, Allen teaches that its compositions (without fibers) when cured exhibit unexpectedly desirable tensile strength and other properties (page 5, lines 1-3). Allen provides neither motivation nor expectation of success.

For similar reasons, the combination of Frances and Allen does not make out a *prima facie* case of obviousness with respect to claims 14 and 23-28. Allen has been discussed above. Frances is directed to the production of particulate elastomeric compositions which may be used to incorporate aramid pulp into elastomers. The aramid pulp is first mixed with a reinforcing filler, to which is added a solution of elastomer in an organic solvent. That mixture is preferably dried to remove the solvent, leaving an elastomeric composition which may be used as is, or for blending the aramid pulp into the same or a different elastomer (column 1, line 44-column 2, line 5). In all Examples, the aramid pulp was premixed with a solution of some sort of rubber (natural, Neoprene or SBR) in toluene.

Thus, Frances too teaches away from the present claims. Frances teaches blending aramid pulp with an elastomeric *solution*. In contrast, the present claims recite that the terpolymer is a *solid* at room temperature. There is nothing in Frances (or Allen, see above) to suggest that feature.

Finally, it is noted that claims 15-22 and 29-30 have not been rejected on prior art grounds.

Applicant submits that the present application is in condition for allowance. Reconsideration and favorable action are earnestly requested.

Respectfully submitted,



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